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***Structural Reforms and Competitiveness:  
Will Europe Overtake America?***

*By: Jan Svejnar*

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# **Structural Reforms and Competitiveness: Will Europe Overtake America?**

**Jan Svejnar\***

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\* Everett E. Berg Professor of Business Administration, Professor of Economics and Executive Director of the William Davidson Institute at the University of Michigan

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## 1. From Convergence to Divergence

Between the late 1940s and early 1990s, Western Europe and Japan experienced an extended period of gradual catching up with the United States in productivity, technological sophistication and living standards. This trend is well captured in a historical perspective in Figure 1, taken from Angus Maddison (1997). In view of this long term convergence, it was reasonable to project that Western Europe and Japan would by and large catch up and in some respects start overtaking the United States in the late 1990s or early 2000s.<sup>1</sup>

Yet, the long term convergence between Western Europe and the United States stopped in the early-to-mid 1990s.<sup>2</sup> Indeed, as may be seen from Figure 2, since the early 1990s European Union's relative position has weakened in terms of rate of growth of the gross domestic product (GDP), and since the mid 1990s also in terms of growth of GDP per capita (Figure 3) and labor productivity (Figure 4).<sup>3</sup> While this change is clearly detectable at the level of Europe as a whole, a number of smaller states of the European Union have done better, on average, than larger states in productivity and employment growth.

The Central and East European states that are entering the European Union have a relatively well-educated population, but they will temporarily reduce the average level of performance in the European Union in terms of labor productivity and income per capita. In the long term, they will likely constitute an important pole of economic growth in the

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<sup>1</sup> See e.g., the discussion in Nelson and Wright (1992).

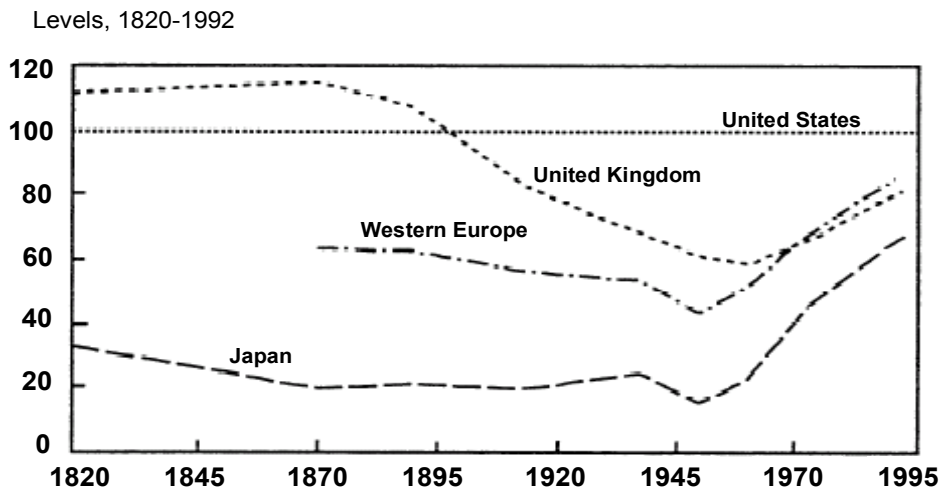
<sup>2</sup> The slowdown of Japan, relative to the United States, has been even more pronounced than that of Western Europe.

<sup>3</sup> The difference in the relative performance in terms of GDP and GDP per capita is accounted for in large part by the relatively large immigration to the United States. It should also be noted that the economy of the European Union was slower in creating jobs, thus generating higher unemployment rates than the United States.

Union. These countries experienced gradual economic slowdown under central planning in the 1970s and 1980s, a severe transformation-related recession in the early 1990s and fairly rapid economic growth in most countries since about 1993-94. Their growth over the last ten years stemmed primarily from the superior performance of the newly created firms and also many, though not all, of the privatized state-owned firms. By 2003, these countries have overcome the basic problems associated with transition from central planning to a market economy and their main challenge lies in improving economic performance as they proceed with integration into the European Union.

### Labor Productivity (GDP per hour)

(1990 base year)

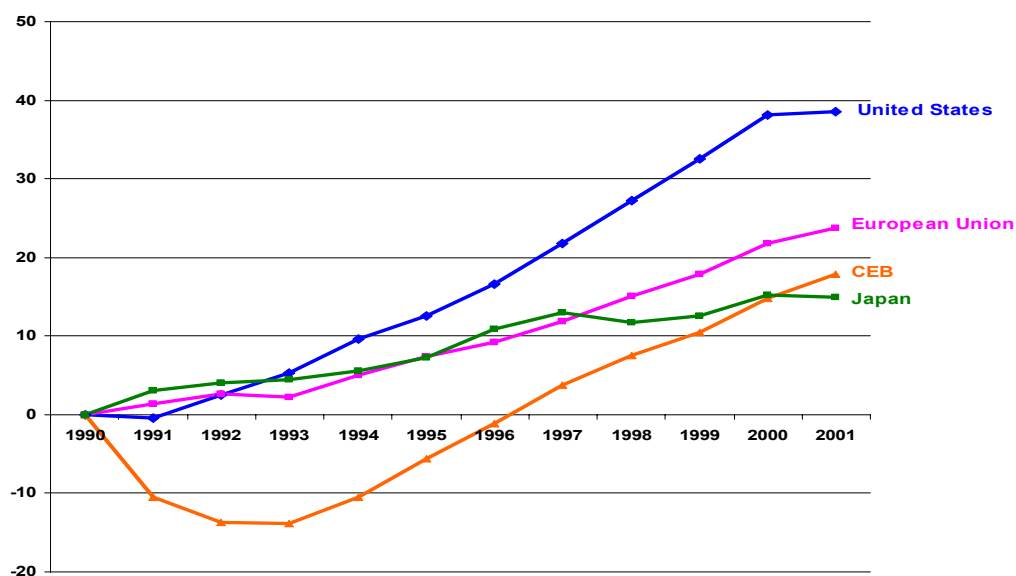


Note: Western Europe in this figure excludes the United Kingdom.

Source: Maddison, Angus (1997). *Journal of Productivity Analysis*, 8, 325-359.

## Real GDP Index

(1990 base year)

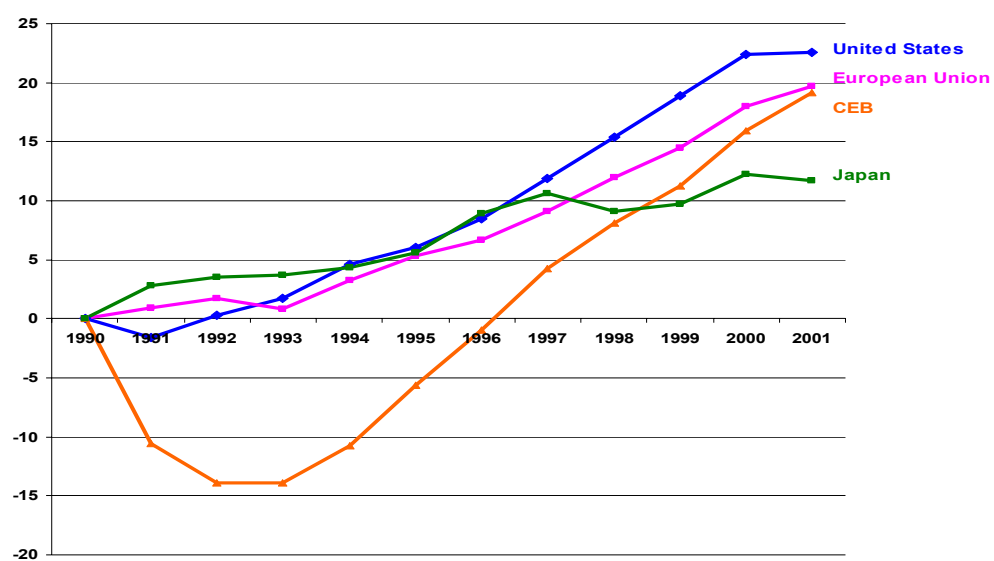


Note: Central Eastern Europe and the Baltic States (CEB)

Source: IMF World Economic Outlook September 2002 and World Bank World Development Indicators 2002.

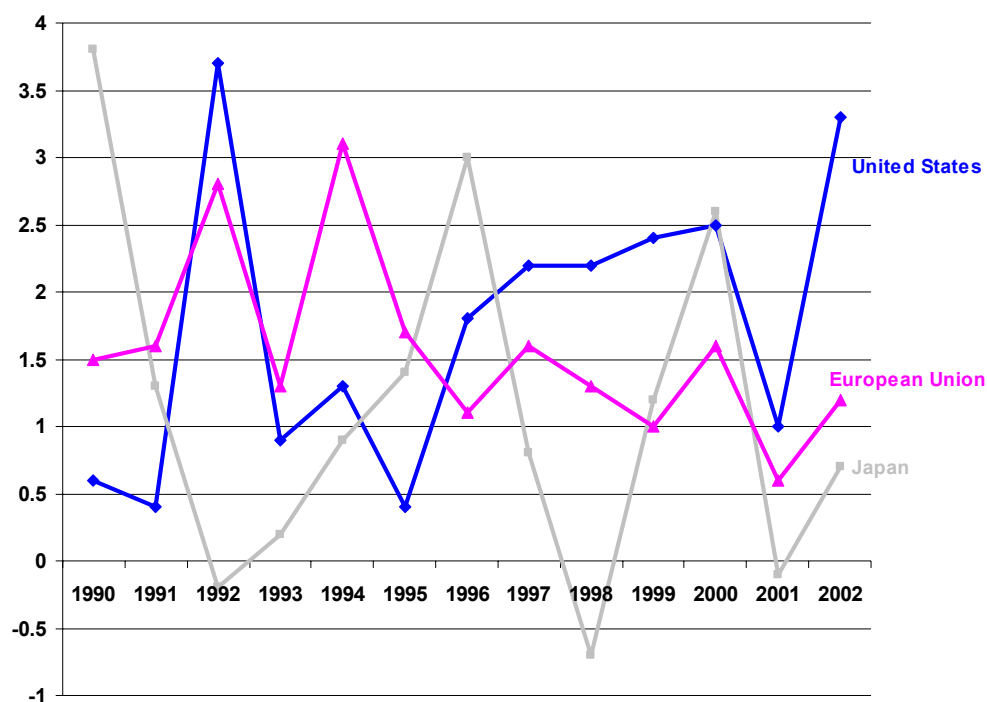
## Real GDP per Capita Index

(1990 base year)



Source: IMF World Economic Outlook September 2002 and World Bank World Development Indicators 2002.

## Labor Productivity in the Business Sector



Note: The business sector in the OECD terminology is defined as total economy less the public sector. Hence business sector employees are defined as total employees less public sector employees.

Source: OECD Economic Outlook 2002.

## 2. What Has Happened To the European-American Convergence?

For most practical purposes, by the early 1990s the United States, Western Europe and Japan reached similar levels of development. The economies of the European Union and the United States became similar in size and the role of the United States was more that of a *primus inter pares* than a leader that is substantially ahead of others. As a result, one has to look to new factors to explain the divergence that has occurred in the last ten years.

My thesis is that as the world became more global, new factors increasingly started to matter for economic performance and the United States moved ahead of Europe

and Japan in both spearheading and making use of these developments. The factors that I identify as being especially important are the following:

- 1) Entrepreneurship and the availability of venture capital
- 2) Regulation (cost of doing business)
- 3) Research and Development
- 4) Human capital
- 5) Leadership and perception of leadership

Let me consider each of these factors next.

### **Entrepreneurship and Venture Capital**

The financial bubble that gradually inflated in the United States in the 1990s generated large amounts of venture capital. This abundance of capital led to much more risk taking than had occurred earlier and it resulted in more invention and innovation. During the same period, Europe generated much less venture capital with the result that new entrepreneurial activities were more subdued in Europe than in North America. To some extent, the more limited take-off of entrepreneurship in Europe was also brought about by the stronger tradition in Europe of a person becoming an employee than an entrepreneur.

In assessing the role of entrepreneurship and venture capital in the contexts of the two continents, it is important to admit that the rapid financial and entrepreneurial developments in the United States also generated considerable waste of resources in that many new entrepreneurial ventures were unsuccessful. However, the positive inventive and innovative effects more than offset these negative trappings that were hard to avoid

in the rapidly evolving environment. Interestingly, venture capitalists and entrepreneurs in Europe moved in the same direction as their counterparts in the United States, but they were less numerous and they proceeded slower and later. As a result, when the financial bubble burst in the early 2000s and the availability of venture capital shrank, the United States was considerably ahead of Europe in terms of reaping the benefits of inventions and innovations that were generated in the 1990s.

### **Regulation – Cost of Doing Business**

The second important factor that explains the poorer performance of Europe in comparison to the United States has to do with the relative effect of regulation on business activities. Traditionally, there has been more emphasis on government regulation of business in Europe than in the United States and this feature became more burdensome for business in the more competitive, global environment.

High and rising labor cost, combined with relatively rigid labor market regulations, made large parts of the European Union increasingly less competitive than the United States and contributed to the relative rise in unemployment in Europe. This represented a major departure from the 1970s, when unemployment was relatively high in the United States and low in Europe.<sup>4</sup> Over the late 1970s, 1980s and 1990s, the US labor markets and their institutions became more flexible as trade unions diminished in importance and real wages rose slowly if at all. Similar developments were by and large absent in Europe.

With the establishment of the European Union, Europe has experienced additional regulatory complications associated with the need to coordinate national and

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<sup>4</sup> See e.g., Blau and Kahn (1999) for details.



Community-wide jurisdictions. At the same time, the US government pursued a number of policies conducive to business/growth. Perhaps the best example of a US government activity that was highly beneficial for business and economic growth was the development of internet. Started as a government activity, the development process was gradually shifted through the government's National Science Foundation to the academic sector and then transferred to the private sector for final development and dissemination in practical use.

As these examples illustrate, the environment of government regulation of and assistance to business has been more favorable to economic growth in the United States than in Europe.

### **Research and Development**

The third factor that is important for understanding the relative performance of Europe and the United States relates to research and development (R&D). Recent technological developments have resulted in a marked rise of fixed costs and decline in the marginal cost in many industries and services. For instance, the fixed cost of developing new drugs in the pharmaceutical industry or new financial products in the banking sector has risen, while the marginal cost of mass producing and delivering additional units of these products to consumers have declined with modern transportation and communication technology and the opening up of large parts of the world after the fall of communism and liberalization in many developing countries. R&D is an important component of the fixed cost and it is often characterized by economies of scale. It hence makes sense for companies to minimize this cost by concentrating R&D in one (often

home) country or region. When it comes to a location decision between the United States and Europe, and national political interests are not dominant, the decision is often in favor of the United States.

The situation is not completely black and white and there is no question that in some areas (e.g., the GSM technology, specialty chemicals and smart cards) Europe is the leader.<sup>5</sup> On average, however, firms in Europe have been doing less research than those in the United States (and Japan) – an outcome that has until recently been driven by the smaller markets (economic segmentation of Europe) than by lower research productivity in Europe relative to the United States.<sup>6</sup> In some sectors (e.g., chemicals and biotech) innovation in Europe has been restricted by policies and the United States has assumed the lead. In other areas, such as information technology, a number of large European producers made earlier strategic decisions that have placed Europe behind in production as well as in use of the sector's products, with smaller European countries being often an exception.<sup>7</sup> Europe is on average also slower than the United States in transferring scientific results into applications, reflecting the fact that the profit motive and the link between the academic and business worlds are still not as strong in Europe as they are in the United States. Finally, the effect of all these factors in differentiating the relative performance of Europe and the United States is enhanced by the fact that there are important positive externalities (spillovers) brought about by the interaction of technical progress, R&D and capital accumulation.<sup>8</sup>

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<sup>5</sup> See e.g., Karlin (2002).

<sup>6</sup> See Eaton, Gutierrez and Kortum (1998).

<sup>7</sup> See also Liikanen (2002)

<sup>8</sup> See e.g., Aghion and Howitt (1998).

In concluding this subsection, it is useful to note that the pharmaceutical industry provides an especially useful example of a sector in which Europe has been losing ground in its ability to sustain innovative processes. The national markets in Europe have historically been rigid and not exposed to competition, while the United States has benefited from increased overall demand and willingness to spend on R&D. The European Commission is now taking steps to encourage competitiveness, enable faster market access for some medicines, strike a more sensible balance between incentives for innovation and promotion of competition for generic products, and support research in innovative medicines. If properly designed and implemented, this is a sensible strategy.

### **Human Capital**

The success of firms and economies in the more global world has increasingly depended on exploiting more effectively various types of human capital. In this context, the United States has been better able than Europe to attract top talent, and the global brain drain has included a net flow of Europeans to the United States. The principal reason for this European-US asymmetry is that young professionals identify the United States with flexibility, sense of potential, excitement, and the ability to realize the “American Dream.” There has of course been a reverse flow as well, but it has not been as substantial as the flow to the United States. While greater financial incentives in the United States are an important part of the story, on average an even greater reason appears to be the more rigid, hierarchical and in general less attractive working environment for young professionals in Europe.

One also hears the argument that an important reason for the relative slowdown of Europe is that the best minds prefer to be “bankers rather than scientists.” This may be true, but the same phenomenon is also observed in the United States. The difference is that in the United States, the best minds among the immigrants often become scientists. To a significant extent, the general problem that the best minds prefer to be “bankers rather than scientists” is hence resolved in the United States by the fact that the first-generation-Americans have been willing and able to drive important parts of scientific and other progress. The same phenomenon is much less pronounced in Europe.

Europe’s problems are further aggravated by its aging population. The problem varies across European countries, but on average the dependency ratio (ratio of non-working to working people) has been rising as a result of low birthrates.<sup>9</sup> The rising dependency ratios and the mostly pay-as-you-go pension systems, whereby currently employed individuals finance the pensions of the currently retired people, have been increasing budgetary burdens and hampering economic performance of many European countries. Yet the options that are being exploited by the United States – high and rising birthrate, partially privately financed pensions and substantial immigration of young people -- have been difficult to implement in Europe. Birthrates have been falling in Europe despite government pro-natality fiscal incentives in a number of countries, pension reform aimed at reducing the dependency ratio has proved to be such an unpopular measure that politicians have by and large shied away from it, and the rise of anti-immigrant political parties has made the possibility of mass immigration of young

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<sup>9</sup> While the United States registered a fertility rate (total births per woman) of 2.06 in 1999, the corresponding figures were 1.77 for France, 1.77 for the United Kingdom and as little as 1.35 for Germany. Among the new accession countries, the rate was 1.4 in Poland and as little as 1.17 in the Czech Republic (Svejnar, 2002).

people politically unacceptable. Yet, Europe will have to consider these and other options if it is again to become a vibrant economy.

Finally, as with investment in physical capital, there are important positive externalities (spillovers) associated with the interaction of technical progress and investment in human capital.<sup>10</sup> Hence, by lagging behind the United States in the human capital dimension, Europe has benefited less from these externalities.

### **Leadership and Perception of Leadership**

An important aspect of the relative position of the United States, Europe and other countries is the perception that the US economic activities lead the rest of the world. This is observed in terms of economic growth, the fact that the US economy leads others into and out of business cycles and the observation that virtually on a daily basis stock markets around the world follow Wall Street.

Why is this, given that the European economy is of a similar size as that of the US? Why does the European economy not become the engine of economic growth when the US economy temporarily slows down? Part of the answer lies in real economic leadership of the United States, as demonstrated by the concentration and diffusion of major innovations, single versus fragmented voice and greater homogeneity of the US market. However, part of the answer is in the form of self-fulfilling expectations. The United States and its corporations project and act with confidence and a sense of leadership.<sup>11</sup> Europe has been much less able to do so, thus remaining a follower rather

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<sup>10</sup> See e.g., Aghion and Howitt (1998).

<sup>11</sup> At the corporate level, the US willingness to act is for instance demonstrated by the finding of Muller and van Tulder (2002) that US firms have profited from the introduction of the single European market at least as much as European core companies, if not more,

than leader even in areas where in principle it could lead. The successful introduction of Euro, key acquisitions such as that of Chrysler by Daimler Benz, the transatlantic projection of regulatory power from Brussels, and the concrete prospect of a European Constitution are steps that may change this perception and behavior.<sup>12</sup>

### **3. Prospects for the Future**

For the reasons identified above, the United States currently has the most dynamic and developed economy among the large industrialized countries. Given its past and ongoing investments and restructuring, the US economy is likely to continue advancing at a relatively rapid pace. Yet, in many respects, further progress in the United States will be difficult. The US economy operates at or close to its potential. Easy options for advancement have been exploited -- the low hanging fruit has been harvested. Future growth hence cannot come from eliminating numerous inefficiencies because they by and large do not exist. US growth must come from further inventions and innovations, underpinned by positive net corporate investment that has been lacking over the last few years. The situation is further complicated by the recent corporate scandals at ENRON, Tyco, Arthur Andersen and other firms that have shaken public trust in the system and the fact that consumers, the pillar of recent US economic growth, are increasingly less confident.

Europe faces the key problems discussed earlier, but by the same token it has tremendous unexploited possibilities that can propel it rapidly forward. With the enlargement into Central Europe, the Baltic States, Malta, and Cyprus, the European

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<sup>12</sup> The fact that Euro has quickly become a major currency in the world bond market is an outcome that is consistent with this thesis, although the phenomenon is a sign of both leadership of Euro and the desire of investors to diversify their portfolios.

Union is increasing its population from about 380 to 450 million people and becomes the largest unified economic area in the world. It has successfully introduced a single currency and it is increasingly able to act as a unified economic power. The fact that Europe has been for the first time unified in a peaceful and cooperative way provides Europe with a major historic opportunity. The fundamental question is whether Europe is ready to realize this potential. My view is that the answer is yes, but success will require a concerted action of public and private sector leaders and people at large. Put differently, when should Europe seize the moment if not now? In fact, the great danger is that the problems enumerated above will generate inertia through risk aversion, manifested by unwillingness to carry out major reforms so as not to rock the boat.<sup>13</sup>

### **Key Steps**

What are the key steps for Europe? Furthering EU's economic and political integration is obviously the top priority. Important steps have already been taken toward establishing a system of EU governance and it is important that this process continue. Adopting and enforcing a reasonable stance on fiscal policies of individual EU countries is also essential if the Union is to become cohesive and strong. Substantial steps need to be taken in further developing financial markets, reducing and reorienting government intervention, improving the functioning of the labor markets, and resolving the aforementioned problems related to taxes and, more generally, the cost of doing business.

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<sup>13</sup> Recent developments in Japan are instructive here. In many respects, Japan has been acting as if it were semi-paralyzed, unable to act. Japan's banking sector crisis and deflationary economy requires major reforms, but political risk aversion has precluded their implementation, resulting in a decade of stagnation and decline. It is important for Europe not to fall into the same type of a trap.

These reforms will greatly strengthen the Union economically and they will enable it to withstand external shocks without the danger of member countries leaving the EU.

Since openness to trade has a strong positive impact on economic growth, Europe should strive to become a larger global player. US trade with East Asia still exceeds that with Europe and there is underlying fear that Europe might opt for protectionism (“Fortress Europe”) rather than further globalization should a significant negative economic shock occur. While such a reaction might be politically expedient in the short term, it would benefit neither Europe nor the world in the long run.

Setting and realizing major goals is an appropriate mechanism for accomplishing progress. The 2010 Knowledge-Based Competitive Challenge, aiming at making Europe the most competitive and technologically most advanced region of the world by 2010, is a good example of such an initiative.<sup>14</sup> EU framework programs aimed at improving competitiveness are a step in the right direction, as are policies aimed at improving intellectual property rights and publicly funded research.

Growth of entrepreneurial ventures will be key for future economic development in Europe and there is perhaps a need for changing attitudes and policies toward decentralized economic activities. Esther Dyson is reported to have reflected on the situation as follows: “The American attitude is let’s make a few mistakes because we will learn from them. The tendency in Europe is to wait for enabling legislation.”<sup>15</sup> There has been progress in Europe in this area but more needs to be done.

Integrating successfully the ten new members of the EU will be key to Europe’s advancement. Over the last dozen years, the Central and East European Countries have

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<sup>14</sup> See also Taverna (2001) for an example in space activities.

<sup>15</sup> See Kaehler (2001).



been the hotbed of Europe's entrepreneurial activities and they are rapidly adopting EU norms, reforming their financial markets and absorbing large inflows of foreign investment. They bring with them a major asset - inexpensive and educated labor force, and they also provide important links to countries further east. The liability that they bring to the EU is their relatively weak legal system and more widespread corruption, both phenomena that can be overcome with sufficiently emphatic approach. The challenge for Western Europe is how to rapidly integrate the newcomers in a productive way, rather than protecting itself by delaying their integration.

In sum, Europe can gain significantly if it proceeds with further integration and pursues policies that are conducive to liberalization, openness, innovation, and key structural reforms.

## References

- Aghion, Philippe and Peter Howitt, *Endogenous Growth Theory*, The MIT Press, February 1998
- Blau, Francine and Lawrence M. Kahn, "Institutions and Laws in the Labor Market," in Orley Ashenfelter and David Card eds. *Handbook of Labor Economics*, Vol. 3A, Chapter 25, pp. 1399-1461, Elsevier 1999
- Eaton, Jonathan, Eva Gutierrez and Samuel Kortum, "European Technology Policy," *Economic Policy*, Vol. 13 (27) pp. 405-439, Oct. 1998
- Kaehler, Richard C., "Innovation and Competitiveness among EU Goals or Knowledge Economy," *Research Technology Management*, Vol. 44 (6) pp. 2-6, Nov/Dec 2001
- Karlin, Susan, "Smart Cards, Widely Used in Europe, Migrate to the United States," *IEEE Spectrum*, Vol. 39, (3), pp. 16-17, 2002
- Liikanen, Erkki, PowerPoint Presentation, 2<sup>nd</sup> Meeting Observatory for New Technologies, Madrid, Spain, May 2002
- Maddison, Angus, "Causal Influences on Productivity Performance 1920-1992: A Global Perspective," *Journal of Productivity Analysis*, Vol. 8 (4) pp. 325-359, Oct. 1997
- Muller, Alan and Rob van Tulder, "Macro Intentions, Micro Realities: A Two-Level Strategic Approach to the Single European Market," *Multinational Business Review*, Vol. 10 (1) pp. 1-10, Fall 2002
- Nelson, Richard R. and Gavin Wright, "The Rise and Fall of American Technological Leadership: The Postwar Era in Historical Perspective," *Journal of Economic Literature*, Vol. XXX (3) pp. 1931-1964, 1992
- Svejnar, Jan, "Transition Economies: Performance and Challenges," *Journal of Economic Perspectives*, Vol. 16 (1) pp. 3-28
- Taverna, Michael A., "U.S. Firms Could Face Stiffer European Threat", *Aviation Week and Space Technology*, Vol. 155, (24) pp. 69-72, 2001

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